

REMARKS

This amendment follows the outstanding Official Action dated 04/23/03 and is intended as a complete and proper response thereto. In particular, the present paper is presented with the view of advancing prosecution of this application on its merits and hopefully placing this case in a clear condition for allowance.

In order to render this Amendment responsive, a Petition for Extension of Time to Respond Within the Third Month Pursuant to § 1.136(a) is submitted herewith in duplicate along with the requisite petition fee of \$475.00 commensurate with the applicant's small entity status as previously established.

Claims 7 and 9-21 remain in the application. These remaining claims have been amended in accordance with the examiners detailed action. Reexamination and reconsideration of the application, as amended, is requested.

As initially presented, claims 7, 12 and 17-20 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Asplin 5,860,763 in view of Wildon 5,558,474, and Poulter 1,915,032. For prior art references to be combined to render obvious a subsequent invention under § 103, there must be something in the prior art as a whole which suggests the desirability, and thus the obviousness, of making the combination. *Uniroyal v. Rudkin-Wiley*, 5 U.S.P.Q. 2d 1434, 1438 (Fed. Cir. 1988). The teaching of

the references can be combined only if there is some suggestion or incentive in the prior art to do so. *In re Fine*, 5 U.S.P.Q. 2d 1596, 1599 (Fed. Cir. 1988). Hindsight is forbidden. It is impermissible to use the claims as a framework from which to pick and choose individual references to recreate the claimed invention. *Id.* at 1600; *W.L. Gore*, 220 U.S.P.Q. at 312. Moreover, the mere fact that a prior art structure could be modified to produce the claimed invention would not have made the modification obvious unless the prior art suggested the desirability of the modification. *In re Fritch*, 23 U.S.P.Q. 2d 1780, 1783 (Fed. Cir. 1992); *In re Gordon*, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984).

The previous Asplin patent 5,860,763 belonging to the applicant is for a sidewalk leveling method and device. In particular, this device is a jack system or lifting tower used to lift slabs of cement to a particular level. The Asplin patent then discloses the method of blowing dried sand underneath the previously lifted concrete to hold the concrete in a lifted position. Finally, the jacks are removed and the dirt is filled in around the concrete. The examiner states that Asplin discloses the use of a sand blaster which is acknowledged. However, the Asplin 763 device is a type of common sandblaster device unlike the device in the current application. Further, in regards to the Asplin 763 patent, the examiner states that Asplin discloses that it is desirable to use a sandblasting device to raise sunken pavement but does not specifically disclose how the sandblasting device is used. This is incorrect as the Asplin 763 patent discloses the use of jack stands to raise a slab or piece

of pavement and then discloses the use of a sandblaster to fill in under the already raised pavement. Thus, this statement by the examiner is in error.

The examiner goes on to state that Wildon discloses a sandblasting apparatus for dispensing sand under pressure. As previously discussed, the applicant concedes that it is known in the art of sandblasting to mix air and sand for cleaning and blasting of materials and this is what Wildon appears to disclose. However, nowhere in the Wildon patent is there any disclosure or suggestion that this device may be used for any type of slab, leveling or pavement adjustment of any kind. In fact, as previously stated, Wildon specifically lays out examples of the use of this device for the cleaning of walls and buildings, a common use for sandblasters.

As can be seen from claim 7 as amended, the limitation of an injector gun having a gun bleed out valve for releasing excess pressure and a gun nozzle for the delivery of a sand/air mixture having a threaded end is included. The examiner states that Wildon discloses an injector gun having a valve 21. As can be seen, claim 7 has been amended to more particularly include a mixing chamber and defines the bleed off valve. However, the valve in Wildon is not a bleed off valve as currently defined and claimed and shown. In column 2, beginning with line 34, the valve 21 is manipulated through the operation of lever 22 and is used to regulate the pressure of air flowing through the device however it is not a bleed off valve but merely an on/off valve for the air pressure. As can be seen, the valve as now claimed in the current application defines over this valve and has been

shown to clearly differ from this valve.

Finally, in combination with the two patents, the examiner uses the Poulter patent to show that it is known to provide a nozzle having a threaded end that may be pounded into a drilled concrete hole so as to create a substantially fluid tight connection with said drilled hole.

The Poulter patent discloses the use of a threaded sleeve placed permanently in the concrete to which a pump nozzle may be connected at a later time, beginning in column 2 line 80 where it is described that metal linings are placed in sections of paving which are laid on material which is expected to settle. Thus, these metal linings previously exist and are placed in the material at the time of laying. This is in contrast to the element as claimed wherein a hole is drilled and the threaded portion is pounded into the hole to form the connection. In fact, Poulter specifically teaches under conditions where the tubes have not been placed, a hole may be drilled through the paving and a hose placed through the hole which can be expanded from the pressure of the pump in order to seal the hose to the hole as described, beginning on line 95, the end of column 2. Thus, it can be seen that Poulter does not describe the use of the threaded end to connect with a drilled hole but rather with a sleeve that is placed in the hole upon laying the concrete. In fact, Poulter solves the problem of concrete that is laid without these sleeves by drilling a hole at a later time and placing an expandable hose and expanding the hose through pressure to seal with the hole. Thus, it is believed that through this discussion, and in particular how the elements of the Asplin 763, Wildon and Poulter patent do not relate or show the elements as

claimed in claim 7 as now amended, it is believed that the patentable nature of claim 7 has been shown.

In regards to claims 12-17, the examiner states that Asplin 763 discloses a method of raising sunken pavement by dispensing sand under pressure underneath the sunken pavement and utilizing a sandblasting apparatus but that Asplin 763 does not disclose the functional requirements of the sandblasting apparatus. Once again, it is believed that this is incorrect as Asplin does not show the use of raising a sunken pavement by dispensing sand, but rather shows how the pavement is raised mechanically through the use of jacks and jack towers and then sand is dispensed under pressure under the pavement to hold the raised pavement in that position. In no way does the Asplin 763 patent disclose or hint at that air may be used to raise the pavement or slabs.

As discussed above, it is recognized that Wildon does disclose a sandblaster as is known in the art. It is also recognized that with most mudpumpers, it is known to drill a hole in the concrete or slab prior to pumping mud under pressure under the slab. The examiner states that Asplin in view of Wildon does not disclose the dispensing of "pavement", i.e., sand, through a drilled hole in the sunken section of pavement. However, Poulter teaches a method of raising sunken pavement mainly dropping down to the step of operating the injector gun in bursts so as to provide compressed air sufficient to temporarily lift the slab and deliver a quantity of sand to permanently fill under said sand. This is not what Poulter teaches. The Poulter patent teaches the use of fill materials in a fluid state that are capable of drying out quickly and leaving a hard filling material in the cavity

beneath the pavement being treated. The Poulter patent states that the filling material can consist of a fluid mixture of dirt and water, i.e. mud, with a small percentage of cement mixed in. As previously discussed, mudjacking is known in the art and this is recognized by the applicant, however mudjacking has many flaws, namely that the fill material mud which dries over time contracts during the drying process. Thus, slabs that are lifted with wet material which dries over times change in elevation, often times requiring this process to be performed in multiple stages on multiple days.

The advantage of the current use of air and sand is that the air lifts the pavement allowing the sand to be placed under the pavement and the use of the dried sand which does not expand or contract over time as it is already dry, allows the air to escape from under the slab within seconds. This allows the slab to settle back down to a level on top of the sand and the operator can continue on until the slab is at an appropriate level. Thus, in contrast to the examiner's claim that Poulter describes the use of air and sand, it has been shown that Poulter does not describe the use of air or even a gas but rather describes the use of a liquid mixture of water, dirt and cement. This system requires a completely different pump and delivery apparatus and contains the limitations as previously discussed.

Finally, in regards to claims 18-20, the examiner states that the use of holes and plugs are disclosed in Poulter. The applicant recognizes that the use of drilling holes and plugging these holes is known in the mudjacking art. However, the Poulter patent discloses the use of sleeves permanently placed in the

slab at the time of making the slab with a plug. Finally, it is believed that it has been shown that the base method claims 12 and 17 clearly define over the art of record, namely the combination of Asplin 763, Wildon and Poulter.

Once again, it is also well known that in order to combine prior art references under Section 103, there must be something in the prior art as a whole which suggests the desirability and the obviousness of making this combination. No where in the Asplin 763, Poulter or Wildon combination is there any suggestion or use that it would be beneficial to use compressed air to temporarily raise a slab while filling in under the slab with the sand. In particular, it has been shown that these patents teach away from this, i.e. the Asplin 763 patent uses mechanical jack lifts, the Wildon patent does not teach any type of lifting as it is a common sandblaster for the removal of paint and cleaning of walls and the Poulter patent is a mudjacking apparatus which uses mud pumped under the cement to lift the cement permanently at whatever level the amount of mud contained underneath sits at, depending upon it's drying state. Thus, it is believed that not only does this combination not show the current application, but this combination is not allowable as there is no suggestion or incentive in the prior art to make this combination and hindsight is forbidden.

The examiner has further rejected Claim 8 under 35 U.S.C. Section 103 as being unpatentable over Asplin 763 in view of Wildon and Poulter as described above and applied to claim 7 in further view of Chitjian 4,646,482. The Chitjian patent generally discloses a recirculating sandblasting machine which is nothing more than a

common sandblaster with a sandblasting nozzle 116 placed inside of a hose to catch the excess sand after blasting against a surface and move this sand through the hose 30. The examiner has stated that the Chitjian patent shows the use of a mixing chamber having a smaller air source hose fitted inside of a larger diameter sand outlet such that the smaller air source extends into the center of the larger diameter sand outlet to create a Venturi effect. The examiner has used the nozzle 116 of the Chitjian to show this in combination with the pc hose. As can best be understood by the applicant, the pc hose and the nozzle are relatively the same size and no where is it shown that one is connected inside of the other. The nozzle 116 dispenses not only the compressed air, but the sand to blast it against the wall. This nozzle is contained inside of the return line 30 which catches excess sand and returns it. Thus, it is believed that Chitjian in no way describes the use of a mixing chamber where air and sand are mixed and the air source is a smaller hose fitted inside a larger diameter sand outlet. As in this case, the hose 116 is the air source and sand outlet, i.e. the nozzle of the Chitjian patent.

Finally, as described above, it is believed there is no incentive to combine the Chitjian recirculating sandblasting machine for cleaning walls, paint, etc. and catching the sand as cleaned with Asplin 763, Wildon and Poulter as described above. Again, this patent teaches directly away from the art in that it is sandblasting and then catching the sand and returning it to blast again, where in the current application sand is placed underneath the pavement to raise the pavement and is thus not returned. As such, it is believed that through this discussion, the current

application has been shown not only to distinguish from the prior art but also to show that this prior art combination is improper.

Claims 9-11 have been rejected under 35 U.S.C. Section 103 as being unpatenable over Asplin 763 in view of Wildon, Poulter and Chitjian as applied to claim 8 above in further view of Casella 5,974,611. The examiner has used the above 5 patents to show that claims 9-11 are obvious. As described above, it is believed that claim 8 distinguishes over these and claims 9-11 further distinguish over the prior art of record. The Casella patent is an interlocking multi-purpose air tool. This air tool is used with interchangeable attachment heads for the cleaning of pipes, tools and spooling attachments such as Venturi systems. The examiner states that the Casella interlocking multi-purpose air tool for use in cleaning out pipes contains a control valve as well as a shut off valve between a sand storage tank and mixing chamber and a high volume air compressor. The applicant admits that Casella appears to contain all types of valves and valve assemblies as it is an interlocking multi-purpose air tool used in cleaning and is a complex device for regulating air flow and for the cleaning of pipes but does not show the current valves. It is believed that this is not relevant to the current invention and it has been clearly shown that the prior claims are admissible. Finally, it is believed that this combination is also not allowable as there is no teaching or incentive to combine these unrelated patents.

Thus, it is believed that to combine this unrelated air tool with the above four unrelated patents and to use five references to try and render these claims obvious under Section 103 is not allowable and the applicant has traversed this rejection.

Finally, claims 13-16 and 21 have been rejected as being unpatentable over Asplin 763 in view of Wildon and Poulter as applied to claim 12 and further in view of Feldsted 4,466,760. The Feldsted patent discloses a mobile material handler and method for transferring bulk material and in particular, solves the problems associated with the storage and transfer of large amounts of dry powdered bulk materials in a vacuum pressure pneumatic conveyor system. As discussed above, it is believed that the prior claims have been shown to be patentable over Asplin 763 in view of Wildon and Poulter, however the further use of Feldsted which shows an unrelated device and in particular is claimed to show a compressed air source does not read upon the claims as currently presented. Once again, there is no incentive anywhere in the teachings to combine these patents and in particular, the Asplin 763, Wildon and Poulter patents as discussed above with a mobile material handler for the method of transferring bulk materials and, in particular, a vacuum pressure pneumatic conveyor system as is shown in Feldsted. Thus, it is believed that this rejection has been traversed.

In light of the foregoing discussion of the applied art of record, the presentation of the amended schedule of claims and the indication as to how such claims are considered to clearly and patentably define over the references, it is believed that the patentable nature of the claims has been demonstrated.

In re: Asplin
Serial No.: 09/687,445

In view of the above remarks, reconsideration and allowance of the claims is kindly requested. Should any matters remain outstanding that may be handle over the phone the examiner is encouraged to call.

Respectfully Submitted,

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